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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,994	08/21/2003	Heinz Willebrand	81598 (7293)	1124

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EXAMINER	
PHAN, HANH	

ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/646,994	WILLEBRAND ET AL.	
	Examiner	Art Unit	
	Hanh Phan	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08/20/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the feature "an optical reflector " specified in the claim 17** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 6,763,195 (Willebrand et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 1-28 of the instant application are encompassed by claims 1-38 of U.S. Patent No. 6,763,195 (Willebrand et al).

Regarding claims 1 and 18, Willebrand et al (U.S. Patent No. 6,763,195) discloses a node incorporating hybrid radio frequency and optical wireless communication links, the node comprising:

at least one laser portion for transmitting data;

at least one radio frequency portion for transmitting data;

a data receiver for receiving data from a data source; and

a controller configured to receive data from a data source and connected with the laser portion and the radio frequency portion to allocate portions of the data to be transmitted through the laser portion and the radio frequency portion (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 2, 8 and 19, Willebrand et al (U.S. Patent No. 6,763,195) discloses the controller is configured as a binary switch such that the data is transmitted exclusively through either one of the laser portion and the radio frequency portion (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 3, 4, 7, 9, 20 and 21, Willebrand et al (U.S. Patent No. 6,763,195) discloses the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claim 5, Willebrand et al (U.S. Patent No. 6,763,195) discloses the laser portion is configured to both transmit and receive and wherein the radio frequency portion is configured to both transmit and receive (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 6, 13, 16 and 23, Willebrand et al (U.S. Patent No. 6,763,195) discloses the laser portion and the radio frequency portion are configured to transmit in multiple channels (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 10-12 and 22, Willebrand et al (U.S. Patent No. 6,763,195) discloses the laser portion and the radio frequency portion have transmit and receive

strengths, and wherein the controller is configured to monitor the transmit and receive strengths, wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on their transmit and receive strengths (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claim 14, Willebrand et al (U.S. Patent No. 6,763,195) discloses the each channel has a transmit and receive strength, and wherein the controller is configured to monitor the transmit and receive strength of each channel, wherein the channels of the data to be transmitted through the laser portion and the radio frequency portion are determined by the controller based on their transmit and receive strengths (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 15 and 24, Willebrand et al (U.S. Patent No. 6,763,195) discloses the at least one laser portion and the at least one radio frequency portion are configured to transmit and receive in tandem, whereby the node may be configured to provide a hybrid serial link to permit tailored radio frequency or optical network connections (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claim 17, Willebrand et al (U.S. Patent No. 6,763,195) discloses the an optical reflector is used to deflect transmissions from the laser portion in order to work around fixed objects in the environment, whereby the node may be used to extend a network and the laser portion can maintain communication without the need for a strict line-of-site connection (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 25-28, Willebrand et al (U.S. Patent No. 6,763,195) discloses the at least a portion of the network is configured with a ring topology (see claims 1-30 of U.S. Patent No. 6,763,195).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Bloom (US Patent No. 6,323,980 cited by applicant).

Regarding claims 1 and 18, referring to Figure 2 and 5, Bloom discloses a node incorporating hybrid radio frequency and optical wireless communication links, the node comprising:

at least one laser portion for transmitting data (i.e., optical transceiver 10, Fig. 2);

at least one radio frequency portion for transmitting data (i.e., RF transceiver 13, Fig. 2);

a data receiver (i.e., packet switch 12, Fig. 2) for receiving data from a data source; and

a controller (i.e., micro-processor 22, Fig. 2) configured to receive data from a data source and connected with the laser portion and the radio frequency portion to allocate portions of the data to be transmitted through the laser portion and the radio frequency portion (col. 3, lines 39-46, col. 5, lines 30-46 and col. 7, lines 18-31).

Regarding claims 2, 8 and 19, Bloom further teaches the controller is configured as a binary switch such that the data is transmitted exclusively through either one of the laser portion and the radio frequency portion (Fig. 2).

Regarding claims 3, 4, 7, 9, 20 and 21, Bloom further teaches the controller is configured to receive environmental information, and wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are adjusted by the controller based on the environmental information (col. 7, lines 28-67, col. 8, lines 1-67, col. 9, lines 1-48, col. 10, lines 56-67, col. 11, lines 1-15, col. 12, lines 24).

Regarding claim 5, Bloom further teaches the laser portion is configured to both transmit and receive and wherein the radio frequency portion is configured to both transmit and receive (Figs. 2 and 5).

Regarding claims 6, 13, 16 and 23, Bloom further teaches the laser portion and the radio frequency portion are configured to transmit in multiple channels (see claims 1-30 of U.S. Patent No. 6,763,195).

Regarding claims 10-12 and 22, Bloom further teaches the laser portion and the radio frequency portion have transmit and receive strengths, and wherein the controller is configured to monitor the transmit and receive strengths, wherein the portions of the data to be transmitted through the laser portion and the radio frequency portion are

adjusted by the controller based on their transmit and receive strengths (col. 10, lines 56-67, col. 11, lines 1-15, col. 12, lines 24).

Regarding claim 14, Bloom further teaches the each channel has a transmit and receive strength, and wherein the controller is configured to monitor the transmit and receive strength of each channel, wherein the channels of the data to be transmitted through the laser portion and the radio frequency portion are determined by the controller based on their transmit and receive strengths (col. 10, lines 56-67, col. 11, lines 1-15, col. 12, lines 24).

Regarding claims 15 and 24, Bloom further teaches the at least one laser portion and the at least one radio frequency portion are configured to transmit and receive in tandem, whereby the node may be configured to provide a hybrid serial link to permit tailored radio frequency or optical network connections (Figs. 2 and 5).

Regarding claim 17, Bloom further teaches the an optical reflector is used to deflect transmissions from the laser portion in order to work around fixed objects in the environment, whereby the node may be used to extend a network and the laser portion can maintain communication without the need for a strict line-of-site connection (Figs. 2 and 5).

Regarding claims 25-28, Bloom further teaches the at least a portion of the network is configured with a ring topology (Figs. 2 and 5).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

Hanh Phan

08/20/2004